

ABSTRACT OF THE DISCLOSURE

An object of the present invention is to minimize the switching elements' heat loss occurring when the operating
5 frequency for PWM inverter control (that is to say, the inverter frequency) passes through a zero point, and thereby maintain sufficient braking force until the electric railcar has stopped.

In such a control apparatus for an electric railcar
10 that provides control so that when the rotational speed of the motor 12 decreases below the required value, the torque of the motor will decrease at the required rate of change, a current limiter 4 for limiting the torque current command "(A)Iqp" output from the current command
15 arithmetic unit 2 is provided to ensure that when the rotational speed of the motor decreases below the required value, the torque current command will be limited to a command value "(B)Iqp" smaller than that command value, and to ensure that the carrier frequency at which PWM signals are
20 created when the switching elements of the electric power converter 9 are controlled by the carrier generator 7 is controlled to become lower than the carrier frequency existing when the rotational speed of the motor decreases below the required value.